(4) Tenure Track Faculty Positions - Adaptive and Functional Matter

The University of California is creating a dynamic new university campus and campus community in Merced, California, which opened in September 2005 as the tenth campus of the University of California and the first American research university built in the 21st century. In keeping with the mission of the University to provide teaching, research and public service of the highest quality, UC Merced will be providing new educational opportunities at the undergraduate, master's and doctoral levels through three academic schools: Engineering, Natural Sciences and Social Sciences, Humanities and the Arts.

The University of California, Merced invites applications for four tenure track faculty positions as part of a cluster hire. These positions are part of an ongoing multi-year, multi-departmental strategic initiative across the schools of natural sciences and engineering to build excellence in the area of Adaptive and Functional Matter. We seek to recruit exceptional candidates with an ability to work across disciplines focusing on the study, both theoretical and experimental, of how complex functional behavior can emerge from fundamental properties of matter. This includes the design and development of adaptive and/or functional matter that will not only achieve function with high fidelity and efficiency but also be responsive, reconfigurable, programmable and sustainable. Areas of interest include, but are not limited to:

Quantum Matter (Q)
Materials, structures and techniques for the manipulation of light and matter at the smallest scales utilizing quantum effects for novel functional properties.

Materials for Renewable energy and Catalysis (EC)
Novel functional materials and systems that are geared toward high efficiency energy harvesting, storage of naturally occurring sources of energy or highly efficient catalysis.

Soft, Bioinspired and Biological Matter (SBM)
Materials and systems that are functionally robust and adaptive to a wide variety of conditions including soft and biologically inspired materials as well as living systems.

These topics are part of a broad range of interdisciplinary topics of interest in this search, which span the research areas of multiple units across campus and include:

- Materials and systems for quantum metrology and information, sensing, optoelectronics, optical metamaterials.
- Synthesis, fabrication and characterization of innovative, programmable and/or adaptive functional material platforms with soft, hard or hybrid materials.
- Mechanics of materials and structure, engineering materials design, materials processing, and other advanced materials.
- Designing, modeling, synthesizing, and/or characterizing new materials for energy conversion, storage, catalysis, and sensing.
- Biological and bio-inspired components and living matter from molecular to cellular scales including structural, functional analysis and engineering of biological macromolecules and their assemblies, protein/nucleic acid engineering and design, synthetic biology, protein/RNA

folding and function, membrane biophysics, cellular biophysics and materials for cellular and tissue engineering.

- Soft, programmable, active and adaptive matter including novel polymeric, bio-polymeric and liquid crystalline materials, mechanical and origami metamaterials

Candidates may be affiliated with one or more academic units with the primary appointment being determined by the candidate's research and teaching interests and qualifications.

Qualifications

Ph.D. in a relevant field is required by the start date. Candidates with broad scientific interests, a record of research excellence and creativity and the potential for active interdisciplinary collaboration at UC Merced will be preferred. While the positions are at the Assistant Professor level, exceptional candidates at the Associate or Full Professor level will also be considered.

Applicants must show promise of excellence in scholarship and have demonstrated the potential to develop and support an independent, innovative research program and to engage in interdisciplinary collaboration. Applicants should also demonstrate an ability to teach and train effectively at both undergraduate and graduate levels.

References

Assistant Professor level should request three letters of reference at the time of application.

Associate/Full Professor level should include contact information for five references with their applications; letters of reference are not required at this time. Once the search committee has determined the short list of candidates, the search committee chair will request letters of recommendation at that time.

Review of Applications

Review of applications will begin on Oct. 30th, 2016 and due to the broad scope of this search will continue with equal priority review of all applications regardless of submission date, until the positions are filled. All applications should be submitted via the website: https://aprecruit.ucmerced.edu/apply/JPF00400.

The anticipated start date for this position is July 1, 2017.

Salary is commensurate with education, experience, and UC academic salary scales.

The University of California, Merced is an equal opportunity/affirmative action employer with a strong institutional commitment to the achievement of diversity among its faculty, students and staff.